Application No.: 10/647,453

REMARKS

Reexamination and reconsideration of this application is respectfully requested in light of the foregoing amendments to the claims and the following remarks.

Claims 1-21 are pending in this application. Independent claims 1, 13, 18 and 21 have been amended. No new matter has been added to the application. Support for the amendments can be found in Fig. 4 and in paragraphs [0053] to [0072] of the specification. Claims 6 and 20 have been amended to change "another" to -- the other -- to avoid any confusion with the word "another" and the term "another driving unit."

Applicant again further notes the Examiner's acknowledgment of Applicant's claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority document as well as the Examiner's acceptance of the formal drawings filed on August 26, 2003.

Rejection Under 35 U.S.C. § 112

Claims 1, 13, 18 and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because it is unclear what "driving unit" is being referred to in the limitation "through the driving circuit provides a driving signal to the driving unit" where multiple driving units are claimed. Independent claims 1, 13 and 18 have been amended to identify the driving units as being either a "particular" driving unit or "another" driving unit. Accordingly, it is believed that by these amendments, the rejection has been overcome.

Rejection Under 35 U.S.C. § 102

Claims 1-9, 12-16 and 18-21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Ishida et al. (U.S. Patent No. 6,639,625). Independent claims 1, 13, 18 and 21 have been amended to clarify the claimed subject matter and to recite that the controlling circuit controls the

driving circuit to drive another driving unit when the detecting circuit detects that the position of the driven member engaged with the driving member of the particular driving unit has not changed at a predetermined time, even though the driving circuit provides a driving signal to the particular driving unit. This feature is not disclosed or suggested by Ishida et al.

According to the flow chart in Fig. 4, both a first driving unit **10** and a second driving unit **20** are driven in step S109 when there is no positional change along the X-axis direction in step S104 or when there is no position change along the Y-axis direction in step S106. Accordingly, the second drive unit in the Y-axis direction is driven when there is no change along the X-axis direction. Also, the first driving unit in the X-axis direction is driven when there is no change along the Y-axis direction.

The Examiner finds that drive mechanisms **61** and **62** and the direction controller **63** comprise the detecting circuit to detect the position of the drive member (image sensing unit **10**). The direction controller **63** receives information on the number of rotations of the drive shafts in the drive mechanisms in accordance with signals from the drive mechanisms through encoders **33**. Thus, the drive shafts are controlled to drive in accordance with detection of positions of their respective axes. However, Ishida et al. does not disclose or suggest using the direction controller **63** to detect the non-movement of the shaft of drive mechanism **61** and to cause the drive shaft of drive mechanism **62** to move if non-movement is detected in the shaft of drive mechanism **61**. Thus, there is no disclosure or suggestion in Ishida et al. that the direction controller **63** controls a driving circuit to drive driving mechanism **62** when the detecting circuit detects that the position of the driven member engaged with the driving member of driving

mechanism **61** has not changed in a predetermined time, even though the driving circuit provides a driving signal to driving mechanism **61**.

As noted in the last response, the problem which prompted the present invention is that if the driving member and driven member of a first driving unit are engaged for a long period of time, the driving member may be temporarily affixed to the surface of the driven member so that when the driving voltage is applied to the first driving unit, the driven member may not move thus preventing the movement of the driven member. Applicant's solution to the problem is to provide the controlling unit with the unique feature of recognizing that the position of a drive member of the first driving unit has not changed over a period of time when the drive voltage is applied to the first driving unit and to automatically signal a drive member of a second driving unit to change position so that to the driven member of the first driven unit will move. Ishida et al. does not recognize the problem let alone provide a solution to this problem. Ishida's detecting circuit is not designed to recognize that the position of the driven member has not moved over a predetermined period of time and to automatically send a drive signal to the drive units as described above.

Accordingly, claims 1-9, 12-16 and 18-21 under 35 U.S.C. § 102(e) are not anticipated by Ishida et al. It is respectfully requested that the rejection be reconsidered and withdrawn.

Rejections Under 35 U.S.C. § 103

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida et al. (U.S. Patent No. 6,639,625) and Ackermann et al. (U.S. Published Application No. 2001/0017665). Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishida et al. and Suzuki (U.S. Patent No. 6,269,580). Claim 17 stands rejected under 35 U.S.C. §

103(a) as being unpatentable over Ishida et al. and Emura (U.S. Patent No. 5,768,038). As set forth *supra*, independent claims 1, 13, 18 and 21 have been amended to more clearly define the function of the controlling and detection circuits to detect whether the position of a drive member of a particular driving unit has changed over a predetermined time, and that if the position has not changed, the controlling circuit sends a drive signal to another driving unit to change position to force a release of the drive member of the particular driving unit to move in accordance with a driving signal sent to the particular driving unit. Ishida et al. do not disclose or suggest this feature of the invention for the reasons stated *supra*, which arguments are incorporated herein by reference. The Ackermann et al., Suzuki and Emura references do not make up for the deficiencies of Ishida et al.

Ackermann et al. discloses piezoelectric motors, but do not disclose or suggest using a detection circuit to detect whether the position of a particular driven member has or has not changed, let alone providing for a control circuit that sends a driving signal after a predetermined period of time to another driving unit drive the drive member of the particular driving unit.

Suzuki is directed to a motor-driven focusing apparatus which includes a processing/control circuit **23** for controlling a single driven member. This circuit controls the focus state detecting system **20** and the focusing lens group driving system **30** to detect the focus state of the object image formed on a reference focal plane. While Suzuki teaches that the initial position of the focusing group is saved in RAM **24** after the start switch **27** is depressed and that a second position is again stored in RAM **24** if switch **27** is depressed again within 0.5 to 1 seconds (col. 6, lines 34-47), the focus state detecting system does not determine if the driven member is or has changed at a predetermined time. Even if it did, the reference does not disclose

that the control circuit sends a driving signal to another driving unit after a predetermined period of time. Moreover, the data stored in RAM is erased if switch 27 is not pressed within 0.5 to 1 seconds (col. 6, lines 48-51). Thus, if the data is erased, the reference does not disclose or suggest that the focus state detecting system would be capable of determining whether the position of the drive member has or has not changed at a predetermined time as required that the independent claims. Also, Suzuki discloses controlling a single driven member as opposed to the claimed invention which requires controlling multiple driving members. In addition, Suzuki does not suggest or disclose that multiple driven members can be controlled to detect the position of each driven member and determine that the positions of the members has or has not changed.

As for Emura, the invention disclosed in this reference is directed to a device employing piezoelectric vibrators. There is no disclosure or suggestion in Emura of using a detection control circuit to control drive members as set forth in the present claims.

For all of the foregoing reasons, it is respectfully requested that the rejections of claims 10, 11 and 17 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Conclusion

For the foregoing reasons, it is submitted that the claims 1-21 are patentable over the teachings of the prior art relied upon by the Examiner. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

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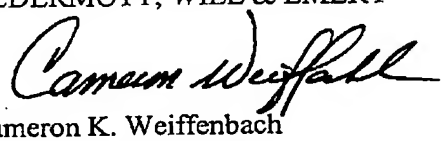
To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. § 1.17 and due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY



Cameron K. Weiffenbach
Registration No. 44,488
Please recognize our Customer No. 20277 as our correspondence address.

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8171 CKW:ckw
Facsimile: 202.756.8087
Date: October 26, 2007

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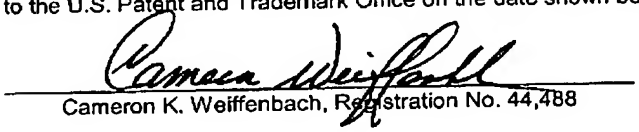

Cameron K. Weiffenbach, Registration No. 44,488 Date: October 26, 2007